

IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

1. (currently amended) A method of treating a patient with a solid tumor, said method comprising:

- (a) administering intraoperatively via a locoregional route to said patient a first agent endowed with tumor tropism in which said first agent is selected from the group consisting of avidin, streptavidin, their polymeric derivatives and their derivatives with polyethylene glycol, capable of concentrating locally on the tumor or in the vicinity of it and then
- (b) administering postoperatively via a systemic route a second anticancer agent with affinity for said first agent,

whereby increased accumulation of said agent endowed with tumor tropism reduces the amount of said second anticancer agent to be administered.

Claim 2 (canceled)

3. (previously presented) The method according to claim 1, in which said first agent is avidin.

4. (previously presented) The method according to claim 1, in which said first agent is avidin and said second anticancer agent is a biotinylated anticancer agent.

5. (previously presented) The method according to claim 1, in which said second anticancer agent comprises an anticancer agent selected from the group consisting of radioisotopes, chemotherapeutic agents, toxins and anticancer cells.

6. (previously presented) The method according to claim 5, in which said anticancer agent is a radioisotope selected from the group consisting of Fe-52, Mn-52m, Co-55,

Cu-64, Ga-67, Ga-68, Tc-99m, In-111, I-123, I-125, I-131, P-32, Sc-47, Cu-67, Y-90, Pd-109, Ag-111, I-131, Pm-149, Re-186, Re-188, At-211, Pb-212, Bi-212 and Lu-177.

7. (previously presented) The method according to claim 6, in which said radioisotope is Y-90 or Lu-177.

Claim 8 (canceled)

9. (previously presented) The method according to claim 1, in which said solid tumor is selected from the group consisting of breast, pancreas, lung, pleural, peritoneal, cervico-facial, brain and bladder tumors.

Claim 10 (canceled)

11. (previously presented) The method according to claim 1, in which said first agent and second anticancer agent are administered by injection.

12. (previously presented) The method according to claim 11, in which said first agent is successively administered by syringe in precise volumes.

13. (previously presented) The method according to claim 4, in which said first agent is administered in a single dose.

14. (currently amended) The method according to claim 1 [[4]], in which said first agent is administered by spray or by injection in the tumor bed and surrounding tissue.

Claims 15-17 (canceled)

18. (currently amended) A method of treating a patient with a solid tumor, said method comprising:

- (a) intraoperatively administering to the patient, who is undergoing surgery, a first agent with affinity for the solid tumor in which said first agent is selected from the group consisting of avidin, streptavidin, their polymeric derivatives and their derivatives with polyethylene glycol, capable of concentrating locally on the tumor or in the vicinity of it, directly to said solid tumor exposed during surgery or an anatomical area containing said solid tumor after surgical removal of the cancer and then
- (b) postoperatively and systemically administering to the patient a second anticancer agent with affinity for said first agent;

thereby concentrating said second anticancer agent in the solid tumor or the anatomical area, whereby increased accumulation of said first agent in said tumor reduces the amount of said second anticancer agent to be administered.

19. (previously presented) The method according to claim 18, in which said solid tumor is selected from the group consisting of breast, pancreas, lung, pleural, peritoneal, cervico-facial, brain and bladder tumors.

20. (previously presented) The method according to claim 18, in which said first agent is avidin and said second anticancer agent is a biotinylated and radiolabelled antibody.

21. (currently amended) The method according to claim 18, in which said first agent is ~~avidin selected from the group consisting of avidin, streptavidin, their polymeric derivatives and their derivatives with polyethylene glycol~~.

22. (previously presented) The method according to claim 18, in which said second anticancer agent comprises an anticancer agent selected from the group consisting of radioisotopes, chemotherapeutic agents, toxins and anticancer cells.

23. (currently amended) A method of treating a patient with a solid tumor, said method comprising:

- (a) administering intraoperatively to the patient, who is undergoing surgery, a protein selected from the group consisting of avidin, streptavidin, a polymeric derivative of avidin, a polymeric derivative of streptavidin, a derivative of avidin with polyethylene glycol and a derivative of streptavidin with polyethylene glycol, capable of concentrating locally on the tumor or in the vicinity of it, directly to said solid tumor exposed during surgery or an anatomical area containing said solid tumor after surgical removal of the cancer and then
- (b) administering postoperatively and systemically to the patient, who has undergone surgery, a biotinylated anticancer agent;

thereby concentrating said biotinylated anticancer agent in the solid tumor or the anatomical area, whereby increased accumulation of said avidin in said tumor reduces the amount of said anticancer agent to be administered.

24. (previously presented) The method according to claim 23, in which said solid tumor is selected from the group consisting of breast, pancreas, lung, pleural, peritoneal, cervico-facial, brain and bladder tumors.

25. (currently amended) The method according to claim 23, in which said protein is ~~avidin is selected from the group consisting of streptavidin, a polymeric derivative of avidin, a polymeric derivative of streptavidin, a derivative of avidin with polyethylene glycol and a derivative of streptavidin with polyethylene glycol.~~

26. (previously presented) The method according to claim 23, in which said second biotinylated anticancer agent comprises an anticancer agent selected from the group consisting of radioisotopes, chemotherapeutic agents, toxins and anticancer cells.

27. (previously presented) The method according to claim 26, in which said biotinylated anticancer agent is a radioisotope selected from the group consisting of Fe-52, Mn-52m, Co-55, Cu-64, Ga-67, Ga-68, Tc-99m, In-111, I-123, I-125, I-131, P-32, Sc-47, Cu-67,

Y-90, Pd-109, Ag-111, I-131, Pm-149, Re-186, Re-188, At-211, Pb-212, Bi-212 and Lu-177.

28. (previously presented) The method according to claim 27, in which said radioisotope is Y-90 or Lu-177.

29. (currently amended) The method according to claim ~~[[4]]~~ 23, in which said protein ~~first agent~~ is administered by injection in the tumor bed and surrounding tissue.

30. (new) A method of treating a patient with a solid tumor, said method consisting of:

- (a) administering intraoperatively to the patient, who is undergoing surgery, a protein selected from the group consisting of avidin, streptavidin, a polymeric derivative of avidin, a polymeric derivative of streptavidin, a derivative of avidin with polyethylene glycol and a derivative of streptavidin with polyethylene glycol, capable of concentrating locally on the tumor cell or in the vicinity of it, directly to said solid tumor exposed during surgery or an anatomical area containing said solid tumor after surgical removal of the cancer and then
- (b) administering postoperatively and systemically to the patient, who has undergone surgery, a biotinylated anticancer agent;

thereby concentrating said biotinylated anticancer agent in the solid tumor or the anatomical area whereby this increased accumulation of said avidin in said tumor site reduces the amount of said anticancer agent to be administered.

31. (new) The method according to claim 30, in which said solid tumor is selected from the group consisting of breast, pancreas, lung, pleural, peritoneal, cervico-facial, brain and bladder tumors.

32. (new) The method according to claim 30, in which said protein is avidin.

33. (new) The method according to claim 30, in which said biotinylated anticancer agent comprises an anticancer agent selected from the group consisting of radioisotopes, chemotherapeutic agents, toxins and anticancer cells.

34. (new) The method according to claim 33, in which said biotinylated anticancer agent is a radioisotope selected from the group consisting of Fe-52, Mn-52m, Co-55, Cu-64, Ga-67, Ga-68, Tc-99m, In-111, I-123, I-125, I-131, P-32, Sc-47, Cu-67, Y-90, Pd-109, Ag-111, I-131, Pm-149, Re-186, Re-188, At-211, Pb-212, Bi-212 and Lu-177.

35. (new) The method according to claim 34, in which said radioisotope is Y-90 or Lu-177.

36. (new) The method according to claim 30, in which said protein and said biotinylated anticancer agent are administered by injection.

37. (new) The method according to claim 30, in which said protein is successively administered by syringe in precise volumes.

38. (new) The method according to claim 30, in which said protein is administered in a single dose.

39. (new) The method according to claim 30, in which said protein is administered by spray or by injection in the tumor bed and surrounding tissue.